

What I claim is:

1. A device for monitoring the superstructure state especially of fixed railroad tracks, comprising a height sensor system installed in a measuring vehicle, preferably constructed as a laser scanning system, for determining the height position of an anchor clamp and/or of the base of a rail and/or of a railroad tie.

2. The device of claim 1 for detecting loosened locking screws, the height-scanning system is disposed over a center loop of the anchor clamps and determines the difference in height between the center loop and a surface of an angle guiding plate.

3. The device of claim 1 for detecting the rigidity of the elastic intermediate layers of the rail support whereby in the region of an axle which is under load, and an axle which is not under load, the height-scanning system in each case has two scanning sensors, which are disposed next to one another and one of which scans a base of a rail and another surface of a railroad tie.

4. The device of claim 1 for detecting loosened railroad ties, whereby in the region of an axle which is under load, and an axle which is not under load, the height-scanning system in each case has two scanning sensors, which are disposed next to one another and of which one scans the surface of the railroad tie and the other the surface of a concrete supporting plate.